

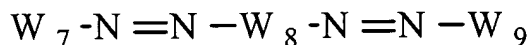
I. AMENDMENT

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-29. (Canceled)

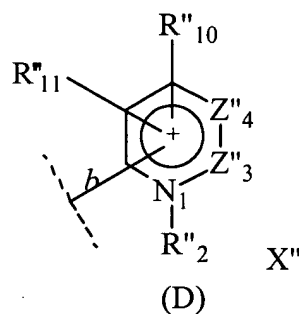
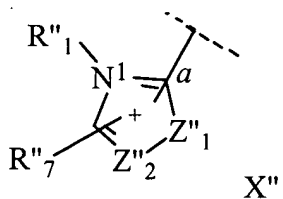
30. (Currently amended) ~~The composition of claim 28, wherein the dye is~~ A dyeing composition for dyeing keratinous fibres comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine comprising a pyrrolidine ring, and a dicationic diazo dye of general formula Vb



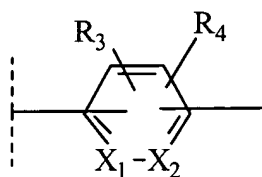
(Vb)

in which

W_7 and W_9 represent independently of each other a heteroaromatic radical represented by formulae (C) and (D) below:



W_8 represents a carbon-based aromatic, pyridine or pyridazinyl group of formula (E)



(E)

in which formulae (C), (D), (E):

X''_1 represents a nitrogen atom or a radical CR''_5

X''_2 represents a nitrogen atom or a radical CR''_6

Z''_1 represents an oxygen or sulphur atom or a radical NR''_8 ,

Z''_2 represents a nitrogen atom or a radical CR''_9 ,

Z''_3 represents a nitrogen atom or a radical CR''_{12} ,

Z''_4 represents a nitrogen atom or a radical CR''_{13} ,

the bond *a* of the 5-membered cationic ring of formula (C) is linked to the azo group of formula (Vb),

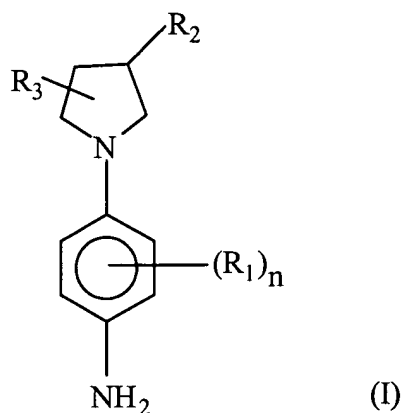
the bond *b* of the 6-membered cationic ring of formula (D) is linked to the azo group of formula (Vb)

R''_3 , R''_4 , R''_5 , R''_6 , R''_7 , R''_9 , R''_{10} , R''_{11} , R''_{12} and R''_{13} , represent, together or independently of each other, a hydrogen atom, a linear or branched, saturated or unsaturated C_1 - C_{16} hydrocarbon-based chain, which can form one or more 3- to 6-membered carbon-based rings, one or more carbon atoms of the carbon-based chain of which may be replaced with an oxygen, nitrogen or sulphur atom or with an SO_2 group, and the carbon atoms of which may be, independently of each other, substituted with one or more halogen atoms; R''_3 , R''_4 , R''_5 , R''_6 , R''_7 , R''_9 , R''_{10} , R''_{11} , R''_{12} and R''_{13} not comprising a peroxide bond or diazo or nitroso radicals,

R''_7 with R''_9 , R''_{10} with R''_{11} and R''_{12} with R''_{13} can form a carbon-based aromatic ring, such as a phenyl,

X'' is an organic or mineral anion[[]];and

wherein said cationic tertiary paraphenylenediamine containing a pyrrolidine ring corresponds to formula I:



in which

n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals R_1 may be identical or different,

R_1 represents a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C_1 - C_6 hydrocarbon chain, it being possible for the chain to contain one or more oxygen, nitrogen, silicon or sulphur atoms or an SO_2 group, and it being possible for the chain to be substituted with one or more hydroxyl or amino radicals; an onium radical Z, the radical R_1 not containing a peroxide bond, or diazo, nitro or nitroso radicals,

R_2 represents an onium radical Z or a radical $-X-C=NR_8-NR_9R_{10}$ in which X represents an oxygen atom or a radical $-NR_{11}$ and R_8 , R_9 , R_{10} and R_{11} represent a hydrogen atom, a C_1 - C_4 alkyl radical or a C_1 - C_4 hydroxyalkyl radical,

R_3 represents a hydrogen atom or a hydroxyl radical.

31. (Original) The composition of claim 30, wherein the dye is selected from the group consisting of:

1,3-dimethyl-2-[4-(1,3-dimethyl(imidazol-1-ium)-2-ylazo)phenylazo]imidazol-1-ium.

1,4-dimethyl-3-[4-(1,4-dimethyl(triazol-2-ium)-3-ylazo)phenylazo]triazol-2-ium.

1-methyl-2-[4-(1-methyl(pyridin-1-ium)-2-ylazo)phenylazo]pyridin-1-ium.

1-methyl-3-[4-(1-methyl(pyridin-1-ium)-3-ylazo)phenylazo]pyridin-1-ium.

1,3-dimethyl-2-[4-(3-methyl(thiazol-3-ium)-2-ylazo)phenylazo]imidazol-1-ium.

1,4-dimethyl-3-[4-(3-methyl(thiazol-3-ium)-2-ylazo)phenylazo]triazol-2-ium.

1,3-dimethyl-2-[4-(1,4-dimethyl(triazol-2-ium)-3-ylazo)phenylazo]imidazol-1-ium.

1-methyl-2-[4-(3-methyl(thiazol-3-ium)-2-ylazo)phenylazo]pyridin-1-ium.

1-methyl-3-[4-(3-methyl(thiazol-3-ium)-2-ylazo)phenylazo]pyridin-1-ium.

1,3-dimethyl-2-[4-(1-methyl(pyridin-1-ium)-2-ylazo)phenylazo]imidazol-1-ium.

1,4-dimethyl-3-[4-(1-methyl(pyridin-1-ium)-2-ylazo)-phenylazo]-triazol-2-ium.

1,3-dimethyl-2-[4-(1-(2-hydroxyethyl)(pyridin-1-ium)-2-ylazo)phenylazo]imidazol-1-ium.

1,4-dimethyl-3-[4-(1-(2-hydroxyethyl)(pyridin-1-ium)-2-ylazo)phenylazo]triazol-2-ium.

1,3-dimethyl-2-[4-(1-methyl(pyridin-1-ium)-3-ylazo)phenylazo]imidazol-1-ium.

1,4-dimethyl-3-[4-(1-methyl(pyridin-1-ium)-3-ylazo)phenylazo]triazol-2-ium.

1,3-dimethyl-2-[4-(1-(2-hydroxyethyl)(pyridin-1-ium)-3-ylazo)phenylazo]imidazol-1-ium.

1,4-dimethyl-3-[4-(1-(2-hydroxyethyl)(pyridin-1-ium)-3-ylazo)phenylazo]triazol-2-ium.

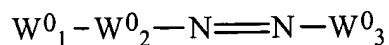
1,3-dimethyl-2-[4-(1,3-dimethyl(imidazol-1-ium)-2-ylazo)-3-methoxyphenylazo]imidazol-1-ium.

1,3-dimethyl-2-[4-(1,4-dimethyl(triazol-2-ium)-3-ylazo)-3-methoxyphenylazo]imidazol-1-ium.

1,3-dimethyl-2-[4-(1-methyl(pyridin-1-ium)-2-ylazo)-3-methoxyphenylazo]imidazol-1-ium.

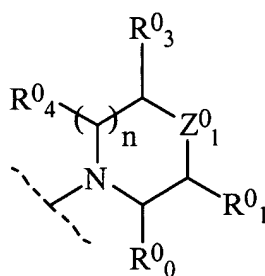
32-39. (Canceled)

40. (Currently amended) ~~The composition of claim 28, wherein the dye is~~ A dyeing composition for dyeing keratinous fibres comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine comprising a pyrrolidine ring, and a monocationic monoazo dye of formula (Vk)



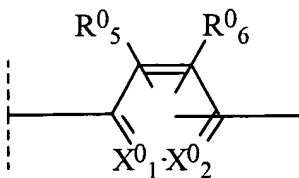
in which

W^0_1 represents a 5-, 6-, 7- or 8-membered heterocycle of formula (II⁰) below



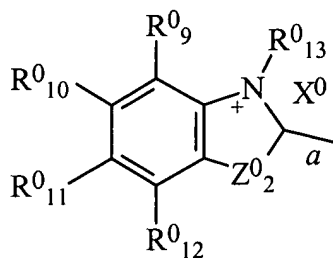
formula (II⁰)

W^0_2 represents a divalent carbon-based aromatic, pyridine or pyridazine group of formula (III⁰) below



formula (III⁰)

W^0_3 represents a cationic heteroaromatic radical represented by formula (IV⁰) below:



(IV⁰)

in which formulae (II⁰), (III⁰) and (IV⁰):

$n = 0, 1, 2$ or 3 , it being understood that when n is greater than or equal to 2 , then the radicals R^0_4 may be identical or different,

X^0_1 represents a nitrogen atom or a radical CR^0_7 ,

X^0_2 represents a nitrogen atom or a radical CR^0_8 ,

Z^0_1 represents a radical CHR^0_2 , an oxygen or sulphur atom or a radical NR^0_{14} ,

Z^0_2 represents an oxygen or sulphur atom or a radical NR^0_{15}

$R^0_0, R^0_1, R^0_2, R^0_3, R^0_4, R^0_5, R^0_6, R^0_7, R^0_8, R^0_9, R^0_{10}, R^0_{11}$ and R^0_{12} , which may be identical or different, represent a hydrogen atom, a linear or branched C_1 - C_{10} hydrocarbon-based chain, which can form one or more 3- to 6-membered carbon-based rings, and which may be saturated or unsaturated, one or more carbon atoms of the carbon-based chain of which may be replaced with an oxygen, nitrogen or sulphur atom or with an SO_2 group, and the carbon atoms of which may be, independently of each other, substituted with one or more halogen atoms; $R^0_0, R^0_1, R^0_2, R^0_3, R^0_4, R^0_5, R^0_6, R^0_7, R^0_8, R^0_9, R^0_{11}$ and R^0_{12} not comprising a peroxide bond or diazo or nitroso radicals,

R^0_{14} represents a hydrogen atom, a linear or branched C_1 - C_{10} hydrocarbon-based chain, which can form one or more 3- to 6-membered carbon-based rings, and which may be saturated or unsaturated, one or more carbon atoms of the carbon-based chain of which may be replaced with an oxygen, nitrogen or sulphur atom or with an SO_2 group, and the carbon atoms of which may be, independently of each other, substituted with one or more halogen atoms, R^0_{14} not comprising a peroxide

bond or diazo or nitroso radicals; it being understood that the said oxygen, nitrogen and sulphur atoms are not directly linked to the nitrogen atom bearing the radical R_{14}^0 .

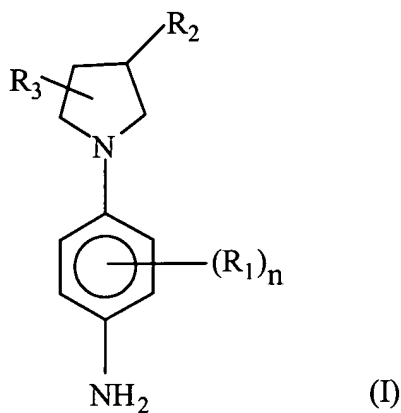
R_5^0 with R_6^0 can form a carbon-based aromatic ring, such as a phenyl,

R_{13}^0 and R_{15}^0 , which may be identical or different, represent a C_1 - C_8 alkyl radical, optionally substituted with one or more radicals chosen from the group consisting of a hydroxyl, a C_1 - C_2 alkoxy, a C_2 - C_4 (poly)hydroxyalkoxy, an amino, a C_1 - C_2 (di)alkylamino, a carboxyl, a sulphonic or an optionally substituted phenyl radical;

the bond a of the cationic ring of formula (IV) is linked to the azo group of formula (I);

X^0 is an organic or mineral anion[[]];and

wherein said cationic tertiary paraphenylenediamine containing a pyrrolidine ring corresponds to formula I:



in which

n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals R_1 may be identical or different,

R_1 represents a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C_1 - C_6 hydrocarbon chain, it being possible for the chain to contain one or more oxygen, nitrogen, silicon or sulphur atoms or an SO_2 group, and it being possible for the chain to be substituted with one or more hydroxyl or amino radicals; an onium

radical Z, the radical R₁ not containing a peroxide bond, or diazo, nitro or nitroso radicals,

R₂ represents an onium radical Z or a radical –X-C=NR₈-NR₉R₁₀ in which X represents an oxygen atom or a radical –NR₁₁ and R₈, R₉, R₁₀ and R₁₁ represent a hydrogen atom, a C₁-C₄ alkyl radical or a C₁-C₄ hydroxyalkyl radical,

R₃ represents a hydrogen atom or a hydroxyl radical.

41. (Currently amended) The composition of claim 40, wherein the dye is ~~a monocationic monoazo dye of formula (VI)~~ selected from the group consisting of:

- 1,3-dimethyl-2-[4-(pyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(3-hydroxypyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(2-carboxypyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(3-aminopyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(2-carboxy-3-hydroxypyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(2-carboxamidopyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(2-hydroxymethylpyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(2-carboxy-4-hydroxypyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(piperidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(3-hydroxypiperidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(3-hydroxymethylpiperidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(3-carboxypiperidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(2-carboxypiperidin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(piperazin-1-yl)phenylazo]benzimidazol-1-ium,
- 1,3-dimethyl-2-[4-(homopiperazin-1-yl)phenylazo]benzimidazol-1-ium,
- 5-amino-1,3-dimethyl-2-[4-(pyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
- 5-amino-1,3-dimethyl-2-[4-(3-hydroxypyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,

5-amino-1,3-dimethyl-2-[4-(2-carboxypyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-amino-1,3-dimethyl-2-[4-(3-aminopyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-amino-1,3-dimethyl-2-[4-(2-carboxy-3-hydroxypyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-amino-1,3-dimethyl-2-[4-(2-carboxamidopyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-amino-1,3-dimethyl-2-[4-(2-hydroxymethylpyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-amino-1,3-dimethyl-2-[4-(2-carboxy-4-hydroxypyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-amino-1,3-dimethyl-2-[4-(piperidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-amino-1,3-dimethyl-2-[4-(3-hydroxypiperidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-amino-1,3-dimethyl-2-[4-(3-hydroxymethylpiperidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-amino-1,3-dimethyl-2-[4-(3-carboxypiperidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-amino-1,3-dimethyl-2-[4-(2-carboxypiperidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-amino-1,3-dimethyl-2-[4-(piperazin-1-yl)phenylazo]benzimidazol-1-ium,
 5-amino-1,3-dimethyl-2-[4-(homopiperazin-1-yl)phenylazo]benzimidazol-1-ium,
 5-dimethylamino-1,3-dimethyl-2-[4-(pyrrolidin-1-yl)-phenylazo]benzimidazol-1-ium,
 5-dimethylamino-1,3-dimethyl-2-[4-(3-hydroxypyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-dimethylamino-1,3-dimethyl-2-[4-(2-carboxypyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,
 5-dimethylamino-1,3-dimethyl-2-[4-(3-aminopyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,

5-dimethylamino-1,3-dimethyl-2-[4-(2-carboxy-3-hydroxypyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,

5-dimethylamino-1,3-dimethyl-2-[4-(2-carboxamidopyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,

5-dimethylamino-1,3-dimethyl-2-[4-(2-hydroxymethylpyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,

5-dimethylamino-1,3-dimethyl-2-[4-(2-carboxy-4-hydroxypyrrolidin-1-yl)phenylazo]benzimidazol-1-ium,

5-dimethylamino-1,3-dimethyl-2-[4-(piperidin-1-yl)phenylazo]benzimidazol-1-ium,

5-dimethylamino-1,3-dimethyl-2-[4-(3-hydroxypiperidin-1-yl)phenylazo]benzimidazol-1-ium,

5-dimethylamino-1,3-dimethyl-2-[4-(3-hydroxymethylpiperidin-1-yl)phenylazo]benzimidazol-1-ium,

5-dimethylamino-1,3-dimethyl-2-[4-(3-carboxypiperidin-1-yl)phenylazo]benzimidazol-1-ium,

5-dimethylamino-1,3-dimethyl-2-[4-(2-carboxypiperidin-1-yl)phenylazo]benzimidazol-1-ium,

5-dimethylamino-1,3-dimethyl-2-[4-(piperazin-1-yl)phenylazo]benzimidazol-1-ium,

5-dimethylamino-1,3-dimethyl-2-[4-(homopiperazin-1-yl)phenylazo]benzimidazol-1-ium.

42-64. (Canceled)

65. (New) The composition of claim 30, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 0.

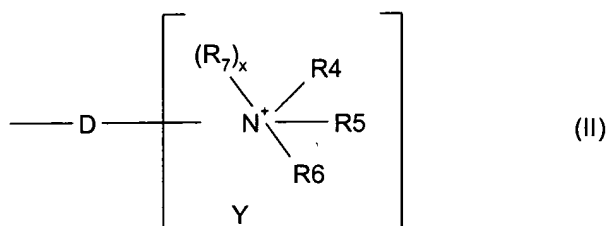
66. (New) The composition of claim 30, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 1 and R₁ is chosen from the group consisting of a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C₁-C₆ hydrocarbon chain; it being possible for one

or more carbon atoms to be replaced by an oxygen, nitrogen, silicon or sulphur atom, or by an SO₂ group, the radical R₁ not containing a peroxide bond, or diazo, nitro or nitroso radicals.

67. (New) The composition of claim 30, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from chlorine, bromine, C₁-C₄ alkyl, C₁-C₄ hydroxyalkyl, C₁-C₄ aminoalkyl, C₁-C₄ alkoxy or C₁-C₄ hydroxyalkoxy radicals.

68. (New) The composition of claim 67, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropoxy or 2-hydroxyethoxy radical.

69. (New) The composition of claim 30, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents the onium radical Z corresponding to formula (II)



in which

D is a single bond of a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals and which may carry one or more ketone functional groups;

R₄, R₅ and R₆, taken separately, represent a C₁-C₁₅ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ amidoalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or di-substituted with a C₁-C₄ alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; or

R₄, R₅ and R₆ together, in pairs, form, with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated carbon ring which may contain one or more heteroatoms, it being possible for the cationic ring to be substituted with a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxy-alkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a (C₁-C₆)alkylcarbonyl radical, a thio (-SH) radical, a C₁-C₆ thioalkyl (-R-SH) radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical;

R₇ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1,

when x = 0, then the linking arm is attached to the nitrogen atom carrying the radicals R₄ to R₆;

when x = 1, then two of the radicals R₄ to R₆ form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and D is linked to the carbon atom of the saturated ring;

Y is a counter-ion.

70. (New) The composition of claim 69, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula II in which x is equal to 0 and R₄, R₅ and R₆ separately are

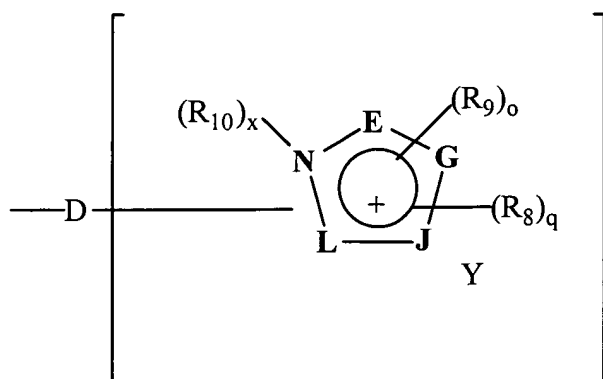
preferably chosen from a C₁-C₆ alkyl radical, a C₁-C₄ monohydroxyalkyl radical, a C₂-C₄ polyhydroxyalkyl radical, a (C₁-C₆)alkoxy(C₁-C₄)alkyl radical, a C₁-C₆ amidoalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, or R₄ with R₅ form together an azetidine ring, a pyrrolidine, piperidine, piperazine or morpholine ring, R₆ being chosen in this case from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, an aminoalkyl radical which is mono- or di-substituted with a (C₁-C₆)alkyl radical, a (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkyl carboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical.

71. (New) The composition of claim 69, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula II in which x is equal to 1 and R₇ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or a (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; R₄ with R₅ together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R₆ being chosen in this case from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyl alkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical.

72. (New) The composition of claim 69, wherein the cationic tertiary para-phenylenediamine is such that D is a single bond or an alkylene chain which may be substituted.

73. (New) The composition of claim 69, wherein the cationic tertiary para-phenylenediamine is such that R₂ is a trialkylammonium radical.

74. (New) The composition of claim 30, wherein the cationic tertiary para-phenylenediamine is such that R_2 represents the onium radical Z corresponding to formula III



(III)

in which

D is a single bond or a linear or branched C_1 - C_{14} alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C_1 - C_6 alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isooxazole, thiazole, isothiazole ring,

q is an integer between 0 and 4 inclusive;

is an integer between 0 and 3 inclusive;

$q+o$ is an integer between 0 and 4;

the radicals R_8 , which are identical or different, represent a halogen atom, a hydroxyl radical, a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a C_1 - C_6 alkoxy radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, an amido radical, a carboxyl radical, a C_1 - C_6 alkylcarbonyl radical, a thio radical, a C_1 - C_6 thioalkyl radical, a (C_1 - C_6)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C_1 -

C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical; it being understood that the radicals R₈ are carried by a carbon atom,

the radicals R₉, which are identical or different, represent a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical, a benzyl radical; it being understood that the radicals R₉ are carried by a nitrogen,

R₁₀ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

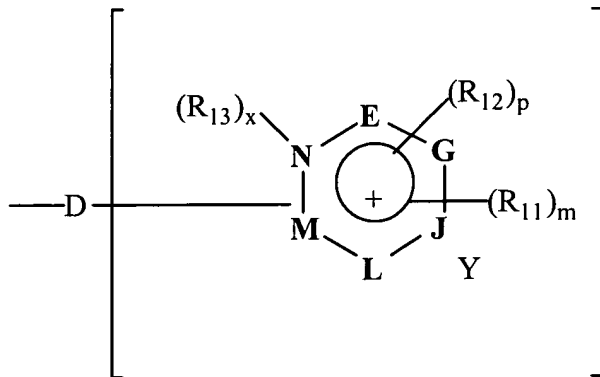
when x = 1, the linking arm D is attached to one of the vertices E, G, J or L,

Y is a counter-ion.

75. (New) The composition of claim 74, wherein the cationic tertiary para-phenylenediamine is such that the vertices E, G, J and L form an imidazole ring.

76. (New) The composition of claim 74, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0, D is a single bond or an alkylene chain which may be substituted.

77. (New) The composition of claim 30, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents an onium radical Z corresponding to formula IV



(IV)

in which:

D is a single bond or a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from an oxygen, sulphur or nitrogen atom, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L and M, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a ring chosen from the pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

p+m is an integer between 0 and 5;

the radicals R₁₁, which are identical or different, represent a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆

monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical; it being understood that the radicals R₁₁ are carried by a carbon atom,

the radicals R₁₂, which are identical or different, represent a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical, a benzyl radical; it being understood that the radicals R₁₂ are carried by a nitrogen,

R₁₃ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

when x = 1, the linking arm D is attached to one of the vertices E, G, J, L or M,

Y is a counter-ion.

78. (New) The composition of claim 77, wherein the vertices E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings.

79. (New) The composition of claim 77, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0 and R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, a (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or

a C₂-C₆ polyhydroxyalkyl radical and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

80. (New) The composition of claim 77, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 1 and R₁₃ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl radical, a (C₁-C₆)alkylcarbonyl radical, an amido radical, a (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di- substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

81. (New) The composition of claim 77, wherein the cationic tertiary para-phenylenediamine is such that R₁₁, R₁₂ and R₁₃ are alkyl radicals which may be substituted.

82. (New) The composition of claim 30, wherein the cationic tertiary para-phenylenediamine is such that the radical R₂ is the radical of formula -XP(O)(O-) OCH₂CH₂N⁺(CH₃)₃ where X represents an oxygen atom or a radical -NR₁₄, R₁₄ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

83. (New) The composition of claim 30, wherein the cationic tertiary para-phenylenediamine is such that the radical R₂ is a guanidine radical of formula -X-C=NR₈-NR₉R₁₀, X represents an oxygen atom or a radical -NR₁₁, R₈, R₉, R₁₀ and R₁₁ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

84. (New) The composition of claim 30, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,
[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide
N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl-guanidinium chloride
N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride
[1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-hexyl)dimethylammonium dichloride
[1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine
{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl} trimethylammonium chloride
1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride
3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
3-{3-[1-(5-trimethylsilyl-4-amino-3-trimethylsilylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride
N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]guanidinium chloride
3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropylammonium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl-dimethylammonium dichloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]oxophosphorylcholine

{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride

1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride

3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]-propyl} 1-methyl-3H-imidazol-1-um chloride

1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride

[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride

3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

3-{3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-um chloride

[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride

3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidiny-1-ium chloride

1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidiny-1-ium chloride

3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3- {[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium bromide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium methosulphate

[1-(4-aminophenyl)pyrrolidin-3-yl]butyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]heptyltrimethylammonium iodide

[1-(4-Aminophenyl)pyrrolidin-3-yl]octyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]decyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium iodide.

85. (New) The composition of claim 30, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride

N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethylammonium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride
 N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
 N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]guanidinium chloride
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride
 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
 1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride
 3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanyl-propyl)-3H-imidazol-1-ium chloride
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyl dimethylammonium chloride
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyl dimethylammonium iodide

[1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate
 [1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.

86. (New) The composition of claim 30, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide
 N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
 N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl)dimethylammonium dichloride
 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium bromide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium methosulphate

[1-(4-aminophenyl)pyrrolidin-3-yl]butyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]heptyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]octyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]decyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium iodide.

87. (New) The composition of claim 30, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride.

88. (New) The composition of claim 30, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride, and

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride.

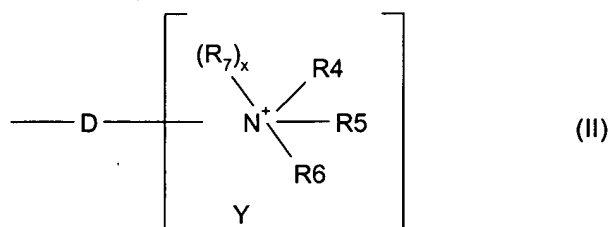
89. (New) The composition of claim 31, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 0.

90. (New) The composition of claim 31, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 1 and R₁ is chosen from the group consisting of a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C₁-C₆ hydrocarbon chain; it being possible for one or more carbon atoms to be replaced by an oxygen, nitrogen, silicon or sulphur atom, or by an SO₂ group, the radical R₁ not containing a peroxide bond, or diazo, nitro or nitroso radicals.

91. (New) The composition of claim 31, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from chlorine, bromine, C₁-C₄ alkyl, C₁-C₄ hydroxyalkyl, C₁-C₄ aminoalkyl, C₁-C₄ alkoxy or C₁-C₄ hydroxyalkoxy radicals.

92. (New) The composition of claim 91, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropoxy or 2-hydroxyethoxy radical.

93. (New) The composition of claim 31, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents the onium radical Z corresponding to formula (II)



in which

D is a single bond of a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals and which may carry one or more ketone functional groups;

R₄, R₅ and R₆, taken separately, represent a C₁-C₁₅ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ amidoalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or di-substituted with a C₁-C₄ alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; or

R₄, R₅ and R₆ together, in pairs, form, with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated carbon ring which may contain one or more heteroatoms, it being possible for the cationic ring to be substituted with a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxy-alkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a (C₁-C₆)alkylcarbonyl radical, a thio (-SH) radical, a C₁-C₆ thioalkyl (-R-SH) radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical;

R₇ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a

(C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1,

when x = 0, then the linking arm is attached to the nitrogen atom carrying the radicals R₄ to R₆;

when x = 1, then two of the radicals R₄ to R₆ form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and D is linked to the carbon atom of the saturated ring;

Y is a counter-ion.

94. (New) The composition of claim 93, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula II in which x is equal to 0 and R₄, R₅ and R₆ separately are preferably chosen from a C₁-C₆ alkyl radical, a C₁-C₄ monohydroxyalkyl radical, a C₂-C₄ polyhydroxyalkyl radical, a (C₁-C₆)alkoxy(C₁-C₄)alkyl radical, a C₁-C₆ amidoalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, or R₄ with R₅ form together an azetidine ring, a pyrrolidine, piperidine, piperazine or morpholine ring, R₆ being chosen in this case from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, an aminoalkyl radical which is mono- or di-substituted with a (C₁-C₆)alkyl radical, a (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkyl carboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical.

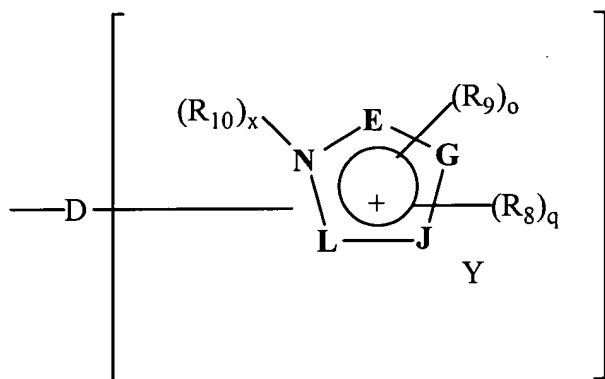
95. (New) The composition of claim 93, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula II in which x is equal to 1 and R₇ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or a (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; R₄ with R₅ together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R₆ being chosen in this case from a C₁-C₆ alkyl

radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyl alkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical.

96. (New) The composition of claim 93, wherein the cationic tertiary para-phenylenediamine is such that D is a single bond or an alkylene chain which may be substituted.

97. (New) The composition of claim 93, wherein the cationic tertiary para-phenylenediamine is such that R₂ is a trialkylammonium radical.

98. (New) The composition of claim 31, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents the onium radical Z corresponding to formula III



(III)

in which

D is a single bond or a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isooxazole, thiazole, isothiazole ring,

q is an integer between 0 and 4 inclusive;

is an integer between 0 and 3 inclusive;

q+t is an integer between 0 and 4;

the radicals R_8 , which are identical or different, represent a halogen atom, a hydroxyl radical, a C_1-C_6 alkyl radical, a C_1-C_6 monohydroxyalkyl radical, a C_2-C_6 polyhydroxyalkyl radical, a C_1-C_6 alkoxy radical, a $\text{tri}(C_1-C_6)\text{alkylsilane}(C_1-C_6)\text{alkyl}$ radical, an amido radical, a carboxyl radical, a C_1-C_6 alkylcarbonyl radical, a thio radical, a C_1-C_6 thioalkyl radical, a $(C_1-C_6)\text{alkylthio}$ radical, an amino radical, an amino radical which is mono- or di-substituted with a $(C_1-C_6)\text{alkyl}$, $(C_1-C_6)\text{alkylcarbonyl}$, amido or $(C_1-C_6)\text{alkylsulphonyl}$ radical; a C_1-C_6 monohydroxyalkyl radical or a C_2-C_6 polyhydroxyalkyl radical; it being understood that the radicals R_8 are carried by a carbon atom,

the radicals R_9 , which are identical or different, represent a C_1-C_6 alkyl radical, a C_1-C_6 monohydroxyalkyl radical, a C_2-C_6 polyhydroxyalkyl radical, a $\text{tri}(C_1-C_6)\text{alkylsilane}(C_1-C_6)\text{alkyl}$ radical, a $(C_1-C_6)\text{alkoxy}(C_1-C_6)\text{alkyl}$ radical, a C_1-C_6 carbamylalkyl radical, a $(C_1-C_6)\text{alkylcarboxy}(C_1-C_6)\text{alkyl}$ radical, a benzyl radical; it being understood that the radicals R_9 are carried by a nitrogen,

R_{10} represents a C_1-C_6 alkyl radical; a C_1-C_6 monohydroxyalkyl radical; a C_2-C_6 polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C_1-C_6 aminoalkyl radical, a C_1-C_6 aminoalkyl radical whose amine is substituted with a $(C_1-C_6)\text{alkyl}$, $(C_1-C_6)\text{alkylcarbonyl}$, amido or $(C_1-C_6)\text{alkylsulphonyl}$ radical; a C_1-C_6 carboxyalkyl radical; a C_1-C_6 carbamylalkyl radical; a C_1-C_6 trifluoroalkyl radical; a $\text{tri}(C_1-C_6)\text{alkylsilane}(C_1-C_6)\text{alkyl}$ radical; a C_1-C_6 sulphonamidoalkyl radical; a $(C_1-C_6)\text{alkylcarboxy}(C_1-C_6)\text{alkyl}$ radical; a $(C_1-C_6)\text{alkylsulphonyl}(C_1-C_6)\text{alkyl}$ radical; a $(C_1-C_6)\text{alkylsulphonyl}(C_1-C_6)\text{alkyl}$ radical; a $(C_1-$

C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

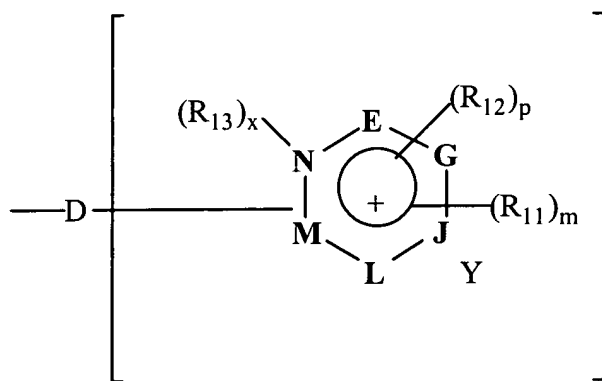
when x = 1, the linking arm D is attached to one of the vertices E, G, J or L,

Y is a counter-ion.

99. (New) The composition of claim 98, wherein the cationic tertiary para-phenylenediamine is such that the vertices E, G, J and L form an imidazole ring.

100. (New) The composition of claim 98, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0, D is a single bond or an alkylene chain which may be substituted.

101. (New) The composition of claim 31, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents an onium radical Z corresponding to formula IV



(IV)

in which:

D is a single bond or a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from an oxygen, sulphur or nitrogen atom, and which

may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L and M, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a ring chosen from the pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

p+m is an integer between 0 and 5;

the radicals R₁₁, which are identical or different, represent a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical; it being understood that the radicals R₁₁ are carried by a carbon atom,

the radicals R₁₂, which are identical or different, represent a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical, a benzyl radical; it being understood that the radicals R₁₂ are carried by a nitrogen,

R₁₃ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-

C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

when x = 1, the linking arm D is attached to one of the vertices E, G, J, L or M,

Y is a counter-ion.

102. (New) The composition of claim 101, wherein the vertices E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings.

103. (New) The composition of claim 101, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0 and R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, a (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

104. (New) The composition of claim 101, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 1 and R₁₃ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl radical, a (C₁-C₆)alkylcarbonyl radical, an amido radical, a (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted

with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

105. (New) The composition of claim 101, wherein the cationic tertiary para-phenylenediamine is such that R₁₁, R₁₂ and R₁₃ are alkyl radicals which may be substituted.

106. (New) The composition of claim 31, wherein the cationic tertiary para-phenylenediamine is such that the radical R₂ is the radical of formula -XP(O)(O-) OCH₂CH₂N⁺(CH₃)₃ where X represents an oxygen atom or a radical -NR₁₄, R₁₄ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

107. (New) The composition of claim 31, wherein the cationic tertiary para-phenylenediamine is such that the radical R₂ is a guanidine radical of formula -X-C=NR₈-NR₉R₁₀, X represents an oxygen atom or a radical -NR₁₁, R₈, R₉, R₁₀ and R₁₁ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

108. (New) The composition of claim 31, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl-guanidinium chloride

N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-hexyl)dimethylammonium dichloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine
 {2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl} trimethylammonium chloride
 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride
 3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium
 chloride
 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
 3-{3-[1-(5-trimethylsilanylethyl-4-Amino-3- trimethylsilanylethylphenyl)pyrrolidin-3-
 yloxy]propyl}-1-methyl-3H-imidazol-1-um chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride
 N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
 N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]guanidinium chloride
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium
 chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-
 trimethylsilanylpropylammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl-
 dimethylammonium dichloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]oxophosphorylcholine
 {2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl} trimethylammonium chloride
 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium
 chloride
 3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]-propyl} 1-methyl-3H-imidazol-1-
 um chloride

1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride

[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride

3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

3-{3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride

[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride

3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate

[1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide
 [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.

109. (New) The composition of claim 31, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide
 N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
 N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethylammonium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride
 N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
 N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]guanidinium chloride
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilyl-propyl)-3H-imidazol-1-ium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium iodide

[1-(4-Aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium bromide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium methosulphate

[1-(4-aminophenyl)pyrrolidin-3-yl]butyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]heptyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]octyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]decyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium iodide.

110. (New) The composition of claim 31, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride

N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl)dimethylammonium dichloride

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium bromide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium methosulphate

[1-(4-aminophenyl)pyrrolidin-3-yl]butyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.

111. (New) The composition of claim 31, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidiny-1-ium chloride.

112. (New) The composition of claim 31, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride, and
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride.

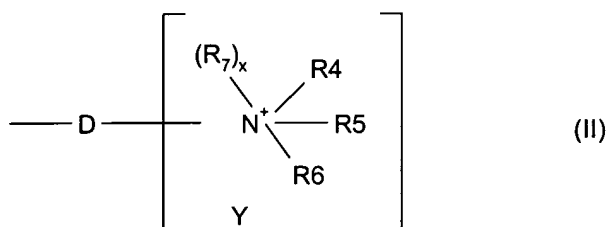
113. (New) The composition of claim 40, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 0.

114. (New) The composition of claim 40, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 1 and R₁ is chosen from the group consisting of a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C₁-C₆ hydrocarbon chain; it being possible for one or more carbon atoms to be replaced by an oxygen, nitrogen, silicon or sulphur atom, or by an SO₂ group, the radical R₁ not containing a peroxide bond, or diazo, nitro or nitroso radicals.

115. (New) The composition of claim 40, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from chlorine, bromine, C₁-C₄ alkyl, C₁-C₄ hydroxyalkyl, C₁-C₄ aminoalkyl, C₁-C₄ alkoxy or C₁-C₄ hydroxyalkoxy radicals.

116. (New) The composition of claim 115, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropoxy or 2-hydroxyethoxy radical.

117. (New) The composition of claim 40, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents the onium radical Z corresponding to formula (II)



in which

D is a single bond of a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals and which may carry one or more ketone functional groups;

R₄, R₅ and R₆, taken separately, represent a C₁-C₁₅ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ amidoalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or di-substituted with a C₁-C₄ alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; or

R₄, R₅ and R₆ together, in pairs, form, with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated carbon ring which may contain one or more heteroatoms, it being possible for the cationic ring to be substituted with a

halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxy-alkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a (C₁-C₆)alkylcarbonyl radical, a thio (-SH) radical, a C₁-C₆ thioalkyl (-R-SH) radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical;

R₇ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1,

when x = 0, then the linking arm is attached to the nitrogen atom carrying the radicals R₄ to R₆;

when x = 1, then two of the radicals R₄ to R₆ form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and D is linked to the carbon atom of the saturated ring;

Y is a counter-ion.

118. (New) The composition of claim 117, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula II in which x is equal to 0 and R₄, R₅ and R₆ separately are preferably chosen from a C₁-C₆ alkyl radical, a C₁-C₄ monohydroxyalkyl radical, a C₂-C₄ polyhydroxyalkyl radical, a (C₁-C₆)alkoxy(C₁-C₄)alkyl radical, a C₁-C₆ amidoalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, or R₄ with R₅ form together an

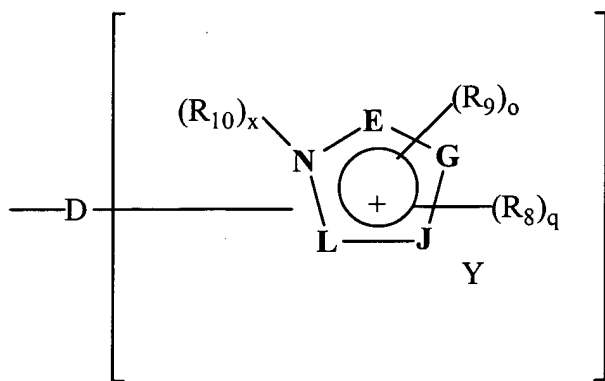
azetidine ring, a pyrrolidine, piperidine, piperazine or morpholine ring, R_6 being chosen in this case from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical; a C_1 - C_6 aminoalkyl radical, an aminoalkyl radical which is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl radical, a $(C_1$ - $C_6)$ alkylcarbonyl, amido or $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical; a tri $(C_1$ - $C_6)$ alkylsilane $(C_1$ - $C_6)$ alkyl radical; a $(C_1$ - $C_6)$ alkyl carboxy $(C_1$ - $C_6)$ alkyl radical; a $(C_1$ - $C_6)$ alkylcarbonyl $(C_1$ - $C_6)$ alkyl radical; an N- $(C_1$ - $C_6)$ alkylcarbamyl $(C_1$ - $C_6)$ alkyl radical.

119. (New) The composition of claim 117, wherein the cationic tertiary para-phenylenediamine is such that R_2 corresponds to formula II in which x is equal to 1 and R_7 is chosen from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyalkyl radical; a C_1 - C_6 aminoalkyl radical, a C_1 - C_6 aminoalkyl radical whose amine is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl, $(C_1$ - $C_6)$ alkylcarbonyl, amido or a $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical, a tri $(C_1$ - $C_6)$ alkylsilane $(C_1$ - $C_6)$ alkyl radical; a $(C_1$ - $C_6)$ alkylcarboxy $(C_1$ - $C_6)$ alkyl radical; a $(C_1$ - $C_6)$ alkylcarbonyl $(C_1$ - $C_6)$ alkyl radical; an N- $(C_1$ - $C_6)$ alkylcarbamyl $(C_1$ - $C_6)$ alkyl radical; R_4 with R_5 together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R_6 being chosen in this case from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyl alkyl radical; a C_1 - C_6 aminoalkyl radical; a C_1 - C_6 aminoalkyl radical whose amine is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl, $(C_1$ - $C_6)$ alkylcarbonyl, amido or $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical; a tri $(C_1$ - $C_6)$ alkylsilane $(C_1$ - $C_6)$ alkyl radical; a $(C_1$ - $C_6)$ alkylcarboxy $(C_1$ - $C_6)$ alkyl radical; a $(C_1$ - $C_6)$ alkylcarbonyl $(C_1$ - $C_6)$ alkyl radical; an N- $(C_1$ - $C_6)$ alkylcarbamyl $(C_1$ - $C_6)$ alkyl radical.

120. (New) The composition of claim 117, wherein the cationic tertiary para-phenylenediamine is such that D is a single bond or an alkylene chain which may be substituted.

121. (New) The composition of claim 117, wherein the cationic tertiary para-phenylenediamine is such that R_2 is a trialkylammonium radical.

122. (New) The composition of claim 40, wherein the cationic tertiary para-phenylenediamine is such that R_2 represents the onium radical Z corresponding to formula III



(III)

in which

D is a single bond or a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isooxazole, thiazole, isothiazole ring,

q is an integer between 0 and 4 inclusive;

is an integer between 0 and 3 inclusive;

q+o is an integer between 0 and 4;

the radicals R₈, which are identical or different, represent a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆

monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical; it being understood that the radicals R₈ are carried by a carbon atom,

the radicals R₉, which are identical or different, represent a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical, a benzyl radical; it being understood that the radicals R₉ are carried by a nitrogen,

R₁₀ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

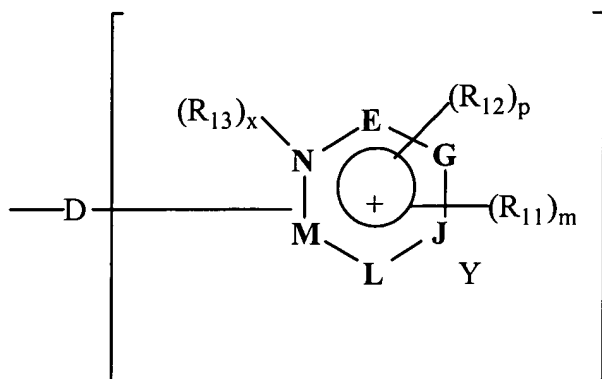
when x = 1, the linking arm D is attached to one of the vertices E, G, J or L,

Y is a counter-ion.

123. (New) The composition of claim 122, wherein the cationic tertiary para-phenylenediamine is such that the vertices E, G, J and L form an imidazole ring.

124. (New) The composition of claim 122, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0, D is a single bond or an alkylene chain which may be substituted.

125. (New) The composition of claim 40, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents an onium radical Z corresponding to formula IV



(IV)

in which:

D is a single bond or a linear or branched C_1 - C_{14} alkylene chain which may contain one or more heteroatoms chosen from an oxygen, sulphur or nitrogen atom, and which may be substituted with one or more hydroxyl, C_1 - C_6 alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L and M, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a ring chosen from the pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

p+m is an integer between 0 and 5;

the radicals R_{11} , which are identical or different, represent a halogen atom, a hydroxyl radical, a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a C_1 - C_6 alkoxy radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, an amido radical, a carboxyl radical, a C_1 - C_6 alkylcarbonyl radical, a thio radical, a C_1 - C_6 thioalkyl radical, a (C_1 - C_6)alkylthio radical, an amino radical, an amino radical which is substituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; a C_1 - C_6

monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical; it being understood that the radicals R₁₁ are carried by a carbon atom,

the radicals R₁₂, which are identical or different, represent a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical, a benzyl radical; it being understood that the radicals R₁₂ are carried by a nitrogen,

R₁₃ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

when x = 1, the linking arm D is attached to one of the vertices E, G, J, L or M,

Y is a counter-ion.

126. (New) The composition of claim 125, wherein the vertices E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings.

127. (New) The composition of claim 125, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0 and R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, a (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆

monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

128. (New) The composition of claim 125, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 1 and R₁₃ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl radical, a (C₁-C₆)alkylcarbonyl radical, an amido radical, a (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

129. (New) The composition of claim 125, wherein the cationic tertiary para-phenylenediamine is such that R₁₁, R₁₂ and R₁₃ are alkyl radicals which may be substituted.

130. (New) The composition of claim 40, wherein the cationic tertiary para-phenylenediamine is such that the radical R₂ is the radical of formula -XP(O)(O-) OCH₂CH₂N⁺(CH₃)₃ where X represents an oxygen atom or a radical -NR₁₄, R₁₄ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

131. (New) The composition of claim 40, wherein the cationic tertiary para-phenylenediamine is such that the radical R₂ is a guanidine radical of formula -X-C=NR₈-NR₉R₁₀, X represents an oxygen atom or a radical -NR₁₁, R₈, R₉, R₁₀ and R₁₁ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

132. (New) The composition of claim 40, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,
[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide
N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl-guanidinium chloride
N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride
[1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-hexyl)dimethylammonium dichloride
[1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine
{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl} trimethylammonium chloride
1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride
3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
3-{3-[1-(5-trimethylsilyl-4-amino-3-trimethylsilyl-phenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride
N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]guanidinium chloride
3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl)-dimethylammonium dichloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]oxophosphorylcholine

{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride

1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride

3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]-propyl}1-methyl-3H-imidazol-1-ium chloride

1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride

[1-(4-Amino-3-trimethylsilyl-4-ethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride

3-[1-(4-Amino-3-trimethylsilyl-4-ethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

3-{3-[1-(4-Amino-3-trimethylsilyl-4-ethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride

[1-(5-trimethylsilyl-4-ethyl-4-Amino-3-trimethylsilyl-4-ethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride

3-[1-(5-trimethylsilyl-4-ethyl-4-Amino-3-trimethylsilyl-4-ethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3- {[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]carbamoyl}methyl}-1-methyl-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium bromide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium methosulphate

[1-(4-aminophenyl)pyrrolidin-3-yl]butyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]heptyltrimethylammonium iodide

[1-(4-Aminophenyl)pyrrolidin-3-yl]octyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]decyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyltrimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium iodide.

133. (New) The composition of claim 40, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride

N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethylammonium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride
 N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
 N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]guanidinium chloride
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride
 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
 1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride
 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride
 3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanyl-propyl)-3H-imidazol-1-ium chloride
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide

[1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate
 [1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.

134. (New) The composition of claim 40, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide
 N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
 N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl)dimethylammonium dichloride
 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate

[1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.

135. (New) The composition of claim 40, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride.

136. (New) The composition of claim 40, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride, and

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride.

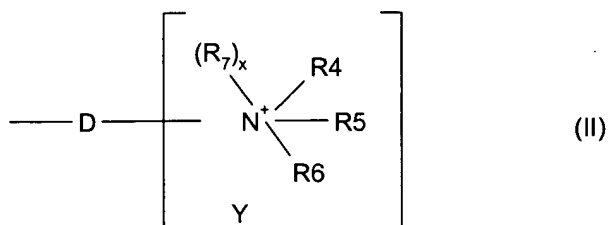
137. (New) The composition of claim 41, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 0.

138. (New) The composition of claim 41, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 1 and R₁ is chosen from the group consisting of a halogen atom; a saturated or unsaturated, aliphatic or alicyclic, C₁-C₆ hydrocarbon chain; it being possible for one or more carbon atoms to be replaced by an oxygen, nitrogen, silicon or sulphur atom, or by an SO₂ group, the radical R₁ not containing a peroxide bond, or diazo, nitro or nitroso radicals.

139. (New) The composition of claim 41, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from chlorine, bromine, C₁-C₄ alkyl, C₁-C₄ hydroxyalkyl, C₁-C₄ aminoalkyl, C₁-C₄ alkoxy or C₁-C₄ hydroxyalkoxy radicals.

140. (New) The composition of claim 139, wherein the cationic tertiary para-phenylenediamine is such that R₁ is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropoxy or 2-hydroxyethoxy radical.

141. (New) The composition of claim 41, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents the onium radical Z corresponding to formula (II)



in which

D is a single bond of a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals and which may carry one or more ketone functional groups;

R₄, R₅ and R₆, taken separately, represent a C₁-C₁₅ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ amidoalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical in which the amine is mono- or di-substituted with a C₁-C₄ alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; or

R₄, R₅ and R₆ together, in pairs, form, with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated carbon ring which may contain one or more heteroatoms, it being possible for the cationic ring to be substituted with a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxy-alkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a (C₁-C₆)alkylcarbonyl radical, a thio (-SH) radical, a C₁-C₆ thioalkyl (-R-SH) radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical;

R₇ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical; a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphinyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a

(C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1,

when x = 0, then the linking arm is attached to the nitrogen atom carrying the radicals R₄ to R₆;

when x = 1, then two of the radicals R₄ to R₆ form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and D is linked to the carbon atom of the saturated ring;

Y is a counter-ion.

142. (New) The composition of claim 141, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula II in which x is equal to 0 and R₄, R₅ and R₆ separately are preferably chosen from a C₁-C₆ alkyl radical, a C₁-C₄ monohydroxyalkyl radical, a C₂-C₄ polyhydroxyalkyl radical, a (C₁-C₆)alkoxy(C₁-C₄)alkyl radical, a C₁-C₆ amidoalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, or R₄ with R₅ form together an azetidine ring, a pyrrolidine, piperidine, piperazine or morpholine ring, R₆ being chosen in this case from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, an aminoalkyl radical which is mono- or di-substituted with a (C₁-C₆)alkyl radical, a (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkyl carboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical.

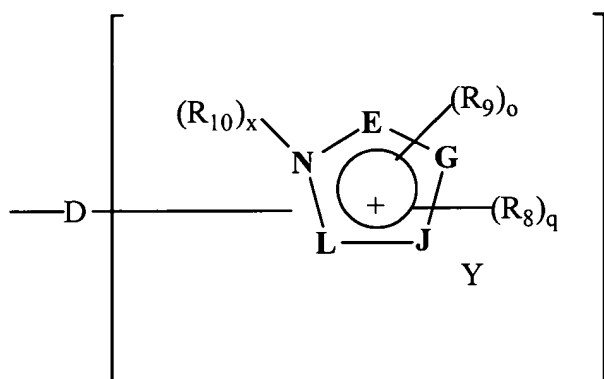
143. (New) The composition of claim 141, wherein the cationic tertiary para-phenylenediamine is such that R₂ corresponds to formula II in which x is equal to 1 and R₇ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or a (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; R₄ with R₅ together form an azetidine, pyrrolidine,

piperidine, piperazine or morpholine ring, R_6 being chosen in this case from a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyl alkyl radical; a C_1 - C_6 aminoalkyl radical; a C_1 - C_6 aminoalkyl radical whose amine is mono- or di-substituted with a $(C_1$ - $C_6)$ alkyl, $(C_1$ - $C_6)$ alkylcarbonyl, amido or $(C_1$ - $C_6)$ alkylsulphonyl radical; a C_1 - C_6 carbamylalkyl radical; a tri $(C_1$ - $C_6)$ alkylsilane $(C_1$ - $C_6)$ alkyl radical; a $(C_1$ - $C_6)$ alkylcarboxy $(C_1$ - $C_6)$ alkyl radical; a $(C_1$ - $C_6)$ alkylcarbonyl $(C_1$ - $C_6)$ alkyl radical; an N- $(C_1$ - $C_6)$ alkylcarbamyl $(C_1$ - $C_6)$ alkyl radical.

144. (New) The composition of claim 141, wherein the cationic tertiary para-phenylenediamine is such that D is a single bond or an alkylene chain which may be substituted.

145. (New) The composition of claim 141, wherein the cationic tertiary para-phenylenediamine is such that R_2 is a trialkylammonium radical.

146. (New) The composition of claim 41, wherein the cationic tertiary para-phenylenediamine is such that R_2 represents the onium radical Z corresponding to formula III



(III)

in which

D is a single bond or a linear or branched C_1 - C_{14} alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C_1 - C_6 alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isooxazole, thiazole, isothiazole ring,

q is an integer between 0 and 4 inclusive;

is an integer between 0 and 3 inclusive;

q+o is an integer between 0 and 4;

the radicals R_8 , which are identical or different, represent a halogen atom, a hydroxyl radical, a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a C_1 - C_6 alkoxy radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, an amido radical, a carboxyl radical, a C_1 - C_6 alkylcarbonyl radical, a thio radical, a C_1 - C_6 thioalkyl radical, a (C_1 - C_6)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; a C_1 - C_6 monohydroxyalkyl radical or a C_2 - C_6 polyhydroxyalkyl radical; it being understood that the radicals R_8 are carried by a carbon atom,

the radicals R_9 , which are identical or different, represent a C_1 - C_6 alkyl radical, a C_1 - C_6 monohydroxyalkyl radical, a C_2 - C_6 polyhydroxyalkyl radical, a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical, a (C_1 - C_6)alkoxy(C_1 - C_6)alkyl radical, a C_1 - C_6 carbamylalkyl radical, a (C_1 - C_6)alkylcarboxy(C_1 - C_6)alkyl radical, a benzyl radical; it being understood that the radicals R_9 are carried by a nitrogen,

R_{10} represents a C_1 - C_6 alkyl radical; a C_1 - C_6 monohydroxyalkyl radical; a C_2 - C_6 polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C_1 - C_6 aminoalkyl radical, a C_1 - C_6 aminoalkyl radical whose amine is substituted with a (C_1 - C_6)alkyl, (C_1 - C_6)alkylcarbonyl, amido or (C_1 - C_6)alkylsulphonyl radical; a C_1 - C_6 carboxyalkyl radical; a C_1 - C_6 carbamylalkyl radical; a C_1 - C_6 trifluoroalkyl radical; a tri(C_1 - C_6)alkylsilane(C_1 - C_6)alkyl radical; a C_1 - C_6 sulphonamidoalkyl radical; a (C_1 - C_6)alkylcarboxy(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylsulphonyl(C_1 - C_6)alkyl radical; a (C_1 - C_6)alkylsulphonyl(C_1 - C_6)alkyl radical; a (C_1 -

C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

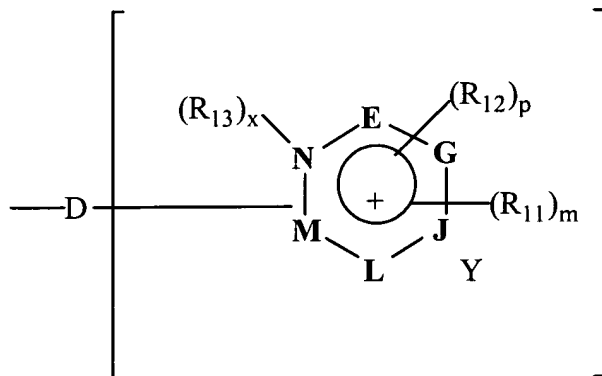
when x = 1, the linking arm D is attached to one of the vertices E, G, J or L,

Y is a counter-ion.

147. (New) The composition of claim 146, wherein the cationic tertiary para-phenylenediamine is such that the vertices E, G, J and L form an imidazole ring.

148. (New) The composition of claim 146, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0, D is a single bond or an alkylene chain which may be substituted.

149. (New) The composition of claim 41, wherein the cationic tertiary para-phenylenediamine is such that R₂ represents an onium radical Z corresponding to formula IV



(IV)

in which:

D is a single bond or a linear or branched C₁-C₁₄ alkylene chain which may contain one or more heteroatoms chosen from an oxygen, sulphur or nitrogen atom, and which

may be substituted with one or more hydroxyl, C₁-C₆ alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L and M, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a ring chosen from the pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

p+m is an integer between 0 and 5;

the radicals R₁₁, which are identical or different, represent a halogen atom, a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a carboxyl radical, a C₁-C₆ alkylcarbonyl radical, a thio radical, a C₁-C₆ thioalkyl radical, a (C₁-C₆)alkylthio radical, an amino radical, an amino radical which is substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical; it being understood that the radicals R₁₁ are carried by a carbon atom,

the radicals R₁₂, which are identical or different, represent a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical, a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical, a benzyl radical; it being understood that the radicals R₁₂ are carried by a nitrogen,

R₁₃ represents a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carboxyalkyl radical; a C₁-C₆ carbamylalkyl radical; a C₁-C₆ trifluoroalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a C₁-C₆ sulphonamidoalkyl radical; a (C₁-C₆)alkylcarboxy(C₁-C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-

C₆)alkyl radical; a (C₁-C₆)alkylsulphonyl(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylsulphonamido(C₁-C₆)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

when x = 1, the linking arm D is attached to one of the vertices E, G, J, L or M,

Y is a counter-ion.

150. (New) The composition of claim 149, wherein the vertices E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings.

151. (New) The composition of claim 149, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0 and R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C₁-C₆)alkyl, a (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ monohydroxyalkyl radical or a C₂-C₆ polyhydroxyalkyl radical and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

152. (New) The composition of claim 149, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 1 and R₁₃ is chosen from a C₁-C₆ alkyl radical; a C₁-C₆ monohydroxyalkyl radical; a C₂-C₆ polyhydroxyalkyl radical; a C₁-C₆ aminoalkyl radical, a C₁-C₆ aminoalkyl radical whose amine is mono- or di-substituted with a (C₁-C₆)alkyl radical, a (C₁-C₆)alkylcarbonyl radical, an amido radical, a (C₁-C₆)alkylsulphonyl radical; a C₁-C₆ carbamylalkyl radical; a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical; a (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl radical; an N-(C₁-C₆)alkylcarbamyl(C₁-C₆)alkyl radical; R₁₁ is chosen from a hydroxyl radical, a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a C₁-C₆ alkoxy radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, an amido radical, a C₁-C₆ alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted

with a (C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, amido or (C₁-C₆)alkylsulphonyl radical; and R₁₂ is chosen from a C₁-C₆ alkyl radical, a C₁-C₆ monohydroxyalkyl radical, a C₂-C₆ polyhydroxyalkyl radical, a tri(C₁-C₆)alkylsilane(C₁-C₆)alkyl radical, a (C₁-C₆)alkoxy(C₁-C₆)alkyl radical, a C₁-C₆ carbamylalkyl radical.

153. (New) The composition of claim 149, wherein the cationic tertiary para-phenylenediamine is such that R₁₁, R₁₂ and R₁₃ are alkyl radicals which may be substituted.

154. (New) The composition of claim 41, wherein the cationic tertiary para-phenylenediamine is such that the radical R₂ is the radical of formula -XP(O)(O-) OCH₂CH₂N⁺(CH₃)₃ where X represents an oxygen atom or a radical -NR₁₄, R₁₄ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

155. (New) The composition of claim 41, wherein the cationic tertiary para-phenylenediamine is such that the radical R₂ is a guanidine radical of formula -X-C=NR₈-NR₉R₁₀, X represents an oxygen atom or a radical -NR₁₁, R₈, R₉, R₁₀ and R₁₁ representing a hydrogen, a C₁-C₄ alkyl radical or a hydroxyalkyl radical.

156. (New) The composition of claim 41, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl-guanidinium chloride

N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-hexyl)dimethylammonium dichloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine
 {2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride
 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride
 3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride
 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride
 3-{3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-um chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride
 N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
 N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]guanidinium chloride
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropylammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl-dimethylammonium dichloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]oxophosphorylcholine
 {2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride
 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride
 3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]-propyl} 1-methyl-3H-imidazol-1-um chloride

1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride

[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride

3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

3-{3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride

[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride

3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate

[1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide
 [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.

157. (New) The composition of claim 41, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide
 N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
 N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethylammonium chloride
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyltetradecylammonium chloride
 N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride
 N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]guanidinium chloride
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropylammonium chloride

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-imidazol-1-ium chloride

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanyl-propyl)-3H-imidazol-1-ium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyl dimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyl dimethylammonium iodide

[1-(4-Aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium bromide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium methosulphate

[1-(4-aminophenyl)pyrrolidin-3-yl]butyl dimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyl dimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexyl dimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]heptyl dimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]octyl dimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]decyl dimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyl dimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium iodide.

158. (New) The composition of claim 41, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride

N-[1-(4-Aminophenyl)pyrrolidin-3-yl]guanidinium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilylpropyl)ammonium chloride

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyl)dimethylammonium dichloride

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyl dimethylammonium chloride

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyl dimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium bromide

[1-(4-aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium methosulphate

[1-(4-aminophenyl)pyrrolidin-3-yl]butyl dimethylammonium iodide

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide
[1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide
[1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide
[1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide
[1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide
[1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide
[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride
[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.

159. (New) The composition of claim 41, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride
3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride
[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride
1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride.

160. (New) The composition of claim 41, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride, and
[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride.